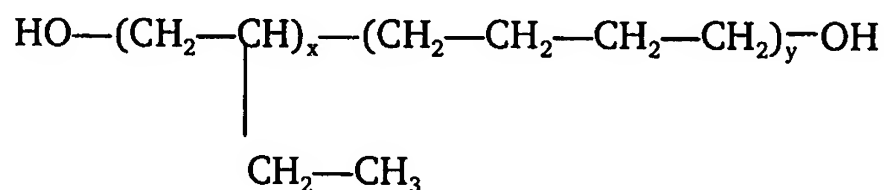


**Claims:**

1. (Cancelled)
2. (Previously presented) The block copolymer of claim 45, wherein when said  $R_f$  is different, said different  $R_f$  groups, independently, is an alkyl having from 4 to 24 carbon atoms, wherein when said  $R_f$  is the same said  $R_f$  is an alkyl having from 3 to about 15 carbon atoms, and wherein said  $R_f$  groups, independently, contain at least 75 percent of the alkyl hydrogen atoms replaced by a fluorine atom.
3. (Previously presented) The block copolymer of claim 2, wherein  $n$ , independently, is from 1 to about 4, wherein DP is from about 3 to about 50, wherein said second block is an olefin block having a number average molecular weight of from about 200 to about 4,000 or a hydrogenated diene block polymer or copolymer having a number average molecular weight of from about 500 to about 15,000.
4. (Previously presented) The block copolymer of claim 3, wherein said  $R_f$  groups, independently, contain at least 90 percent of the hydrogen atoms replaced by a fluorine atom, and wherein said olefin block polymer or copolymer is derived from olefin monomers having 2 or 3 carbon atoms.
5. (Previously presented) The block copolymer of claim 4, wherein  $n$ , independently, is 1 or 2, wherein  $R^1$  is hydrogen or methyl, and wherein said  $R_f$  is different, independently, the number of carbon atoms therein is from about 6 to about 20.
6. (Previously presented) The block copolymer of claim 5, wherein said DP is from about 3 or about 4 to about 10 or about 20, wherein said second block connected to said first block is said hydrogenated diene block polymer or copolymer having a number average molecular weight of from about 1,000 to about 8,000.
7. (Previously presented) The block copolymer of claim 54, wherein said hydrogenated butadiene block copolymer has the structure



wherein the ratio of said x group to said y groups is from about 0.10 to about 10, including said at least one optional repeat unit and wherein said repeat unit is derived from tetrahydrofuran.

8. (Previously presented) The block copolymer of claim 7, wherein said  $R_f$  is perfluorinated.

9. (Previously presented) A polymeric composition comprising a blend of a polyolefin and the block copolymer of claim 44.

10. (Previously presented) A polymeric composition comprising a blend of a polyolefin and the block copolymer of claim 3, wherein said polyolefin is derived from one or more olefin monomers having from 2 to 6 carbon atoms.

11. (Previously presented) A polymeric composition comprising a blend of a polyolefin and from about 0.1 to about 10 parts by weight of the block copolymer of claim 5 per 100 parts by weight of the polyolefin, and wherein said polyolefin is derived from an olefin monomer having 2 or 3 carbon atoms, or combinations thereof.

12. (Previously presented) A polymeric composition comprising a blend of a polyolefin and from about 0.5 to about 3.0 parts by weight of the block copolymer of claim 7 per 100 parts by weight of the polyolefin, and wherein said polyolefin is derived from an olefin monomer having 2 or 3 carbon atoms, or combinations thereof.

13. (Previously presented) A fiber comprising a blend of a polyolefin and the block copolymer of claim 44.

14. (Previously presented) A fiber comprising a blend of a polyolefin and the block copolymer of claim 3, wherein said polyolefin is derived from one or more olefin monomers having from 2 to 6 carbon atoms.

15. (Previously presented) A fiber comprising a blend of a polyolefin and from about 0.1 to about 10 parts by weight of the block copolymer of claim 5 per 100 parts by weight of the polyolefin, and wherein said polyolefin is derived from an olefin monomer having 2 or 3 carbon atoms, or combinations thereof.

16. (Previously presented) A fiber comprising a blend of a polyolefin and from about 0.5 to about 3.0 parts by weight of the block copolymer of claim 7 per 100 parts by weight of the polyolefin, and wherein said polyolefin is derived from an olefin monomer having 2 or 3 carbon atoms, or combinations thereof.

17. (Original) A fabric comprising a fiber of claim 13.

18. (Original) A fabric comprising a fiber of claim 14.

19. (Original) A fabric comprising a fiber of claim 15.

20. (Cancelled)

21. (Withdrawn) A grafted polymer comprising:

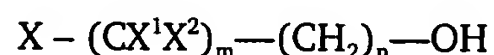
a) a maleated polyolefin derived from at least one olefin monomer having from 2 to about 8 carbon atoms, said maleated polyolefin having a plurality of maleated sites, or

b) a maleated polymer derived from at least one vinyl substituted aromatic monomer having from 8 to about 12 carbon atoms, said maleated polymer having a plurality of maleated sites, and

a fluorinated compound grafted to at least one of said maleated sites of said a) maleated polyolefin or said b) maleated polymer, said fluorinated compound derived from the reaction of a fluorinated alcohol and an amino dicarboxylic acid.

22. (Withdrawn) A grafted polymer according to claim 21, wherein said a) maleated polyolefin is derived from an olefin monomer having 2 carbon atoms, or 3 carbon atoms, or combinations thereof, and wherein said b) maleated polymer is derived from styrene,  $\alpha$ -methylstyrene, or combinations thereof.

23. (Withdrawn) A grafted copolymer according to claim 22, wherein said fluorinated alcohol has the formula



wherein X is H or F, wherein  $X^1$ , independently, is H or F for each repeat unit, wherein  $X^2$ , independently, is H or F for each repeat unit, with the proviso that at least one of

said X, said X<sup>1</sup> or said X<sup>2</sup> is F; wherein m is from 2 to about 30, and wherein n is from about 1 to about 6.

24. (Withdrawn) A grafted polymer according to claim 23, wherein said amino dicarboxycyclic acid is glutamic acid, aspartic acid, or combinations thereof.

25. (Withdrawn) A grafted polymer according to claim 24, wherein in said fluorinated alcohol X is F, X<sup>1</sup> is F, and X<sup>2</sup> is F, wherein m is from about 6 to about 20, and wherein n is from 1 to about 4.

26. (Withdrawn) A polymeric composition comprising a blend of a polyolefin derived from olefin monomers having from 2 to about 8 carbon atoms and the composition of claim 21.

27. (Withdrawn) A polymeric composition comprising a blend of a polyolefin derived from olefin monomers having 2 or 3 carbon atoms or combinations thereof, and the composition of claim 23.

28. (Withdrawn) A polymeric composition comprising a blend of a polyolefin derived from olefin monomers having 2 or 3 carbon atoms or combinations thereof, and the composition of claim 25.

29. (Withdrawn) A fiber comprising a blend of a polyolefin derived from olefin monomers having from 2 to about 8 carbon atoms and the composition of claim 21.

30. (Withdrawn) A fiber composition comprising a blend of a polyolefin derived from olefin monomers having 2 or 3 carbon atoms or combinations thereof and the composition of claim 23.

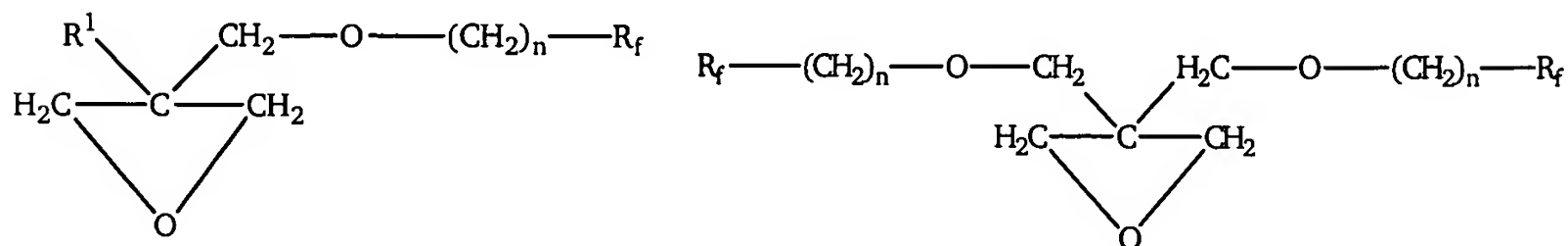
31. (Withdrawn) A fiber composition comprising a blend of a polyolefin derived from olefin monomers having 2 or 3 carbon atoms or combinations thereof and the composition of claim 25.

32. (Withdrawn) A fabric comprising a fiber of claim 29.

33. (Withdrawn) A fabric comprising a fiber of claim 30.

34. (Withdrawn) A fabric comprising a fiber of claim 31.

35. (Previously presented) A block copolymer composition, comprising:  
the reaction product of a plurality of oxetane monomers having the formula



where  $\text{R}^1$  is hydrogen or an alkyl having from 1 to 6 carbon atoms,  $n$ , independently, is from 1 to 6, and wherein

$\text{R}_f$  is a) the same for each monomer of Formula 1A or Formula 1B and is a fluorinated aliphatic having from 1 to about 20 carbon atoms, or

b) at least two different fluorinated aliphatics having said Formula 1A or Formula 1B and, independently, has from about 2 to about 30 carbon atoms,

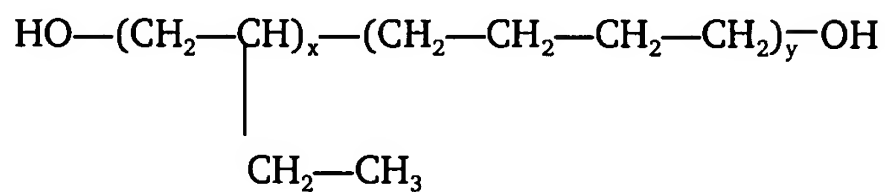
with a mono or polyhydroxyl terminated hydrocarbon polymer comprising: an olefin polymer or copolymer derived from at least one olefin monomer having from 2 to about 8 carbon atoms; or a hydrogenated diene polymer or copolymer derived from at least one conjugated diene monomer having from 4 to about 10 carbon atoms.

36. (Previously presented) A block copolymer composition according to claim 35, wherein when said  $\text{R}_f$  is different said different  $\text{R}_f$  groups, independently, is an alkyl having from 4 to 24 carbon atoms, wherein when said  $\text{R}_f$  is the same said same  $\text{R}_f$  is an alkyl having from 3 to about 15 carbon atoms, and wherein said  $\text{R}_f$ , independently, contain at least 75 percent of said alkyl hydrogen atoms replaced by a fluorine atom.

37. (Previously presented) A block copolymer composition according to claim 36, wherein at least 75 percent of the hydrogen atoms of said  $\text{R}_f$  alkyl group is replaced by a fluorine atom.

38. (Previously presented) A block copolymer composition according to claim 37, wherein  $n$ , independently, is 1 or 2, wherein  $\text{R}^1$  is hydrogen or methyl, and wherein when said  $\text{R}_f$  is different, independently, the number of carbon atoms therein is from

about 6 to about 20, and wherein said hydrogen carbon polymer is said hydrogenated butadiene block copolymer and has the structure



wherein the ratio of said x group to said y groups is from about 0.10 to about 10.

39. (Previously presented) A block copolymer composition according to claim 38, wherein said reaction product is a diblock or a triblock copolymer, wherein said hydrogenated diene block copolymer has a number average molecular weight of from about 1,000 to about 8,000.

40. (Previously presented) A block copolymer composition according to claim 39, wherein said  $R_f$  is perfluorinated, and wherein x of said hydrogenated butadiene block copolymer is about 2 and wherein said y is about 8.

41. (Withdrawn) A fiber comprising a blend of a polyolefin and a composition of claim 35.

42. (Withdrawn) A fiber comprising a blend of a polyolefin and the composition of claim 37, wherein said polyolefin is derived from one or more olefin monomers having from 2 to 6 carbon atoms.

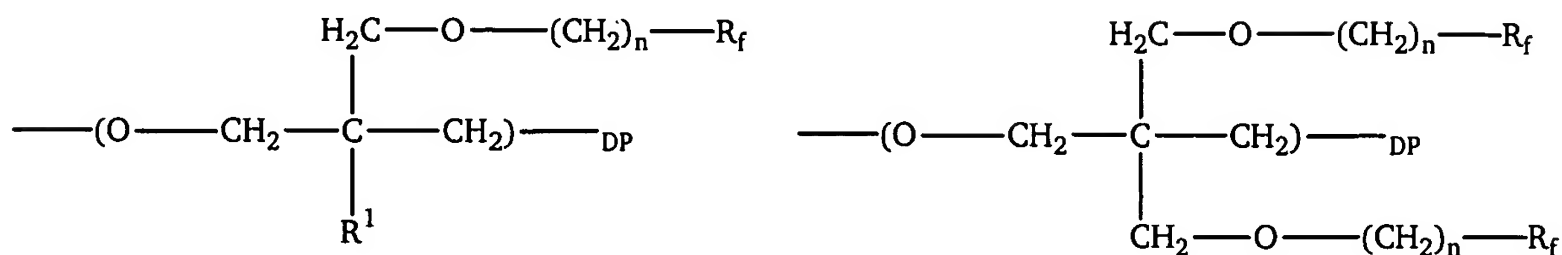
43. (Withdrawn) A fiber comprising a blend of a polyolefin and from about 0.1 to about 10 parts by weight per 100 parts by weight of the composition of claim 39, and wherein said polyolefin is derived from an olefin monomer having 2 or 3 carbon atoms, or combinations thereof.

44. (Previously presented) A block copolymer comprising:

a first block having repeat units that include pendant ether groups having a terminal fluorinated group, and

a second block having hydrocarbon repeat units, where the first block is connected to the second block via an ether linkage.

45. (Previously presented) The block copolymer of claim 44, where the first block has repeat units defined by one or both of the formulae



where  $\text{R}^1$  is an alkyl group having from 1 to 6 carbon atoms,  $n$  is independently an integer from 1 to 6,  $\text{R}_f$  is a fluorinated group, and DP, which represents the number of repeat units within said first block, is an integer from 2 to about 100.

46. (Previously presented) The block copolymer of claim 45, where the number of repeat units (DP) within said first block is from 3 to about 50.

47. (Previously presented) The block copolymer of claim 45, where  $\text{R}_f$  is the same for each repeat unit within said first block and is a fluorinated aliphatic group containing from 1 to about 20 carbon atoms.

48. (Previously presented) The block copolymer of claim 45, where the repeat units within said first block include at least two different fluorinated aliphatic groups containing from 2 to about 30 carbon atoms.

49. (Previously presented) The block copolymer of claim 47, where the fluorinated aliphatic groups are characterized by having at least 50% of the available hydrogen atoms replaced by fluorine.

50. (Previously presented) The block copolymer of claim 48, where the fluorinated aliphatic groups are characterized by having at least 50% of the available hydrogen atoms replaced by fluorine.

51. (Previously presented) The block copolymer of claim 47, where the fluorinated aliphatic groups are characterized by having at least 95% of the available hydrogen atoms replaced by fluorine.
52. (Previously presented) The block copolymer of claim 48, where the fluorinated aliphatic groups are characterized by having at least 95% of the available hydrogen atoms replaced by fluorine.
53. (Previously presented) The block copolymer of claim 44, where said first block includes at least one repeat unit derived from an oxirane, a 4-membered cyclic ether, a 5-membered cyclic ether group, 1,4-dioxane, 1,3-dioxane, 1,3-dioxalane, trioxane, caprolactone, or combinations thereof.
54. (Previously presented) The block copolymer of claim 44, where said second block comprises an olefin polymer or copolymer derived from at least one olefin monomer having from 2 to about 8 carbon atoms or a hydrogenated diene polymer or copolymer derived from at least one conjugated diene monomer having from 4 to about 10 carbon atoms.
55. (Withdrawn) A block copolymer prepared by a process comprising polymerizing at least one type of oxetane monomer in the presence of a hydroxyl-terminated polymer to provide the block copolymer, where the oxetane monomer includes pendent ether groups that include, at the terminal portion thereof, a fluorinated aliphatic group.
56. (Withdrawn) The block copolymer of claim 55, where the hydroxyl-terminated polymer is a hydroxyl-terminated polyolefin or a hydroxyl-terminated hydrogenated polydiene.
57. (Withdrawn) The block copolymer of claim 56, where by hydroxyl-terminated polymer is a poly hydroxyl-terminated polymer.
58. (Withdrawn) The block copolymer of claim 55, where the oxetane monomer includes pendant ether groups, and where the terminal portion of the ether group is a perfluorinated group, where the fluorinated aliphatic group is a perfluorinated group.



59. (Withdrawn) The block copolymer of claim 55, where said step of polymerizing the oxetane monomer takes place in the presence of a catalyst.

60. (Withdrawn) The block copolymer of claim 59, where the catalyst includes boron trifluoride.

61. (Cancelled)

62. (Previously presented) The block copolymer of claim 45, where  $R_f$  is a perfluorinated group.

63. (New) The block copolymer of claim 55, where the fluorinated aliphatic group is characterized by having at least 95% of the available hydrogen atoms replaced by fluorine.